

AMENDMENTS TO THE SPECIFICATION

Applicant respectfully submits the following amendments to the Specification.

Please enter the following amendments for the first full paragraph on page 17 that begins at line 4 and concludes at line 15:

Referring generally to Fig. 8, the system is adapted to reduce the level of noise in the electrical signals received from a temperature feedback device 60. Typically, the temperature feedback device 60 is a thermocouple. However, other types of temperature feedback devices may be used, such as an RTD (resistance-temperature-detector) bridge circuit. The thermocouple wires 600 may be tack welded onto the workpiece 52 to secure them in position. In the illustrated embodiment, an extension 602 is used to couple the thermocouple wires ~~602~~600 from the workpiece 52 to one of a plurality of electrical connectors 604 on the rear of the controller 72. In the illustrated embodiment, the extension 602 has a receptacle end 606 that is adapted to matingly engage a connector portion 608 of the thermocouple 60. The extension has a plug end 610 opposite the receptacle end 606 that is adapted to matingly engage one of the electrical connectors 604.

Please enter the following amendments for the paragraph beginning at line 17 of page 17 and concluding at line 3 of page 18:

The connector portion 608 of the thermocouple 60 has a positive prong 612 and a negative prong 614. A DC voltage proportional to temperature is produced at the junction of the thermocouple wires 600 and transmitted to the two prongs of the connector portion 608. In the illustrated embodiment, the receptacle end 606 of the extension ~~62~~602 has three jacks: a positive voltage jack 616, a negative voltage jack 618, and a ground jack 620. The positive voltage jack 616 is adapted to receive the positive prong 612 and the negative voltage jack 618 is adapted to receive the negative prong 614. The plug end 610 of the extension 602 has three prongs: a positive

voltage prong 622, a negative voltage prong 624, and a ground prong 626.

Please enter the following amendments for the first full paragraph on page 18 that begins at line 5 and concludes at line 16:

As best illustrated in Fig. 9, the extension cable 602 has a first insulated conductor 628 and a second insulated conductor 630. The first insulated conductor 628 electrically couples the positive voltage prong 622 to the positive voltage jack 616. The second insulated conductor 630 electrically couples the negative voltage prong 624 to the negative voltage jack 618. A conductive shield 632 surrounds each of the first and second insulated conductors. A drain wire 633 is coupled to the conductive shielding 632. The drain wire 633 electrically couples the ground prong 626 to the ground jack 620. The ground jack 620 of the extension 602 enables the shielding 632 in one extension 602 to be electrically coupled to the shielding 632 in another extension 602 when a plurality of extensions 602 are connected together. Additionally, rather than a separate shielded extension, a thermocouple wire having shielding extending along a portion of its length may also be used. Insulation ~~633~~631 is provided over the shielding 632.